PATENT COOPERATION TREATY

n the ERNATIONAL SEARCHING AUTHORITY			WIPO PCT		
•				1 0 1	
				•	
			WRIT	TEN OPINION OF THE	
	see form PCT/ISA/220		INTERNATIONAL SEARCHING AUTHORITY		
		•		(PCT Rule 43 <i>bis</i> .1)	
	•				
	-		Date of mailing		
		_	(day/month/year)	see form PCT/ISA/210 (second sheet)	
			FOR FURTHER ACTION		
) Plic	ant's or agent's file reference form PCT/ISA/220		See paragraph 2 be	elow	
		International filing dat	e (day/month/year)	Priority date (day/month/year)	
tem CT	ational application No. //B2005/050242	20.01.2005		23.01.2004	
	national Patent Classification (IPC) or t	ooth national classificat	ion and IPC		
terr I∩⊿	L12/18, H04L1/18	•			
انوq. اک	cant NINKLIJKE PHILIPS ELECTRO	ONICS N.V.			
					
	This opinion contains indicati	one relating to the	following items:		
i .	- This saiding Androine incircain	Ully leigning to the	10110		
1.	This opinion contains indicati			•	
Ι.	This opinion contains indicati Box No. Basis of the op	•			
Ι.	Box No. 1 Basis of the of	oinlon		entive step and industrial applicability	
Ι.	☑ Box No. I☐ Box No. II☐ Box No. III☐ Non-establish	oinlon ment of opinion with		entive step and industrial applicability	
Ι.	☑ Box No. I☐ Box No. II☐ Box No. III☐ Box No. III☐ Non-establish	ment of opinion with	regard to novelty, inve		
1.	 ☑ Box No. I ☐ Box No. II ☐ Box No. III ☐ Box No. IV ☐ Lack of unity 	ment of opinion with	regard to novelty, inve	d to novelty, inventive step or industrial	
1.	 ☑ Box No. I ☐ Box No. II ☐ Box No. III ☐ Box No. IV ☐ Box No. IV ☐ Box No. V ☐ Rox No. VI ☐ Certain documents 	ment of opinion with of invention atement under Rule 4 citations and explana	regard to novelty, inve 13 <i>bis</i> .1(a)(i) with regare	d to novelty, inventive step or industrial	
1.	 ☑ Box No. I ☐ Box No. II ☐ Box No. III ☐ Box No. IV ☐ Box No. IV ☐ Box No. V ☐ Box No. V ☐ Box No. VI ☐ Certain defect 	ment of opinion with of invention utement under Rule 4 citations and explanations the international terms the international citations.	regard to novelty, inve 13 <i>bis</i> .1(a)(i) with regard ations supporting such	d to novelty, inventive step or industrial	
1.	 ☑ Box No. I ☐ Box No. II ☐ Box No. III ☐ Box No. IV ☐ Box No. IV ☐ Box No. V ☐ Box No. V ☐ Box No. VI ☐ Certain defect 	ment of opinion with of invention atement under Rule 4 citations and explana	regard to novelty, inve 13 <i>bis</i> .1(a)(i) with regard ations supporting such	d to novelty, inventive step or industrial	
	 Box No. I Box No. II Box No. III Box No. IV Box No. IV Box No. V Box No. V Box No. VI Certain docur Box No. VIII Certain defect Box No. VIII Certain observants 	ment of opinion with of invention stement under Rule 4 citations and explana ments cited its in the international	regard to novelty, investigations supporting such national application	d to novelty, inventive step or industrial statement	
2.	 Box No. I Basis of the or Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of Box No. V Reasoned state applicability; of Box No. VI Certain documents Box No. VII Certain defect Box No. VIII Certain observational processor 	ment of opinion with of invention Itement under Rule 4 Citations and explana ments cited Its In the international realinary examination	regard to novelty, investigations supporting such national application	n will usually be considered to be a	
	 Box No. I Basis of the or Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity or Box No. V Reasoned state applicability; or Box No. VI Certain documents Box No. VII Certain defect Box No. VIII Certain observed FURTHER ACTION 	ment of opinion with of invention atement under Rule 4 citations and explanaments cited at in the international reliminary examinational Preliminary Examination	regard to novelty, investigations application ational application ational application on is made, this opinion mining Authority ("IPE	n will usually be considered to be a A"). However, this does not apply where	
	 Box No. I Basis of the or Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity or Box No. V Reasoned state applicability; or Box No. VI Certain documents Box No. VII Certain defect Box No. VIII Certain observed FURTHER ACTION 	ment of opinion with of invention atement under Rule 4 citations and explanaments cited at in the international reliminary examinational Preliminary Examination	regard to novelty, investigations application ational application ational application on is made, this opinion mining Authority ("IPE	n will usually be considered to be a A"). However, this does not apply where	
	Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of a demand for international priority and applicant chooses an Authorized the applicant chooses an Authorized and applicational Bureau under Russilland and applicant chooses an Authorized and applicant chooses and authorized and applicant cho	ment of opinion with of invention atement under Rule 4 citations and explanaments cited at in the international Preliminary examinational Preliminary Examination of the first other than this of the 66.1 bis(b) that writed	regard to novelty, investigations. 1 (a) (i) with regard to novelty, investigations supporting such application ational application on is made, this opinion on to be the IPEA and then opinions of this in	d to novelty, inventive step or industrial statement n will usually be considered to be a A"). However, this does not apply where it the chosen IPEA has notifed the ternational Searching Authority	
	Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of Box No. V Reasoned state applicability; of Box No. VI Certain document Box No. VII Certain defect Box No. VIII Certain observation of the International Priority of the applicant chooses an Author International Bureau under Ruwill not be so considered.	ment of opinion with of invention atement under Rule 4 citations and explanaments cited ats in the international Preliminary examinational Preliminary Examination of the first of the firs	regard to novelty, investigations. 1 (a) (i) with regard ations supporting such a lapplication national application on is made, this opinion of the logical and then opinions of this in the a written opinion of the logical and the logical	n will usually be considered to be a A"). However, this does not apply where the chosen IPEA has notifed the ternational Searching Authority If the IPEA, the applicant is invited to the chosen in the expiration of three	
	Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of Box No. V Reasoned state applicability; of Box No. VI Certain document Box No. VII Certain defect Box No. VIII Certain observation of the International Priority of the applicant chooses an Author International Bureau under Ruwill not be so considered.	ment of opinion with of invention atement under Rule 4 citations and explanaments cited ats in the international Preliminary examinational Preliminary Examination of the first of the firs	regard to novelty, investigations. 1 (a) (i) with regard ations supporting such a lapplication national application on is made, this opinion of the logical and then opinions of this in the a written opinion of the logical and the logical	n will usually be considered to be a A"). However, this does not apply where the chosen IPEA has notifed the ternational Searching Authority If the IPEA, the applicant is invited to the chosen in the expiration of three	
	Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of Box No. V Reasoned state applicability; of Box No. VI Certain docum Box No. VI Certain defect Service Box No. VIII Certain observation of the International priority of the applicant chooses an Authority of the applicant chooses an Authority of the International Bureau under Ruwill not be so considered. If this opinion is, as provided a submit to the IPEA a written remonths from the date of mailing the submit of the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the date of mailing the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths from the submit to the IPEA a written remonths the submit to the IPEA a written remonths from the submit to t	ment of opinion with of invention atement under Rule 4 citations and explanaments cited ats in the international Preliminary examinational Preliminary Examination of the first of the firs	regard to novelty, investigations. 1 (a) (i) with regard ations supporting such a lapplication national application on is made, this opinion of the logical and then opinions of this in the a written opinion of the logical and the logical	n will usually be considered to be a A"). However, this does not apply where If the chosen IPEA has notifed the ternational Searching Authority	
	Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of Box No. IV Reasoned state applicability; of Box No. VI Certain document Box No. VII Certain defect Box No. VIII Certain observable Box No. VIII C	ment of opinion with of invention atement under Rule 4 citations and explanaments cited ats in the international vations on the international Preliminary Examination of the first of the f	regard to novelty, investigations. 1 (a) (i) with regard ations supporting such a lapplication national application on is made, this opinion of the logical and then opinions of this in the a written opinion of the logical and the logical	n will usually be considered to be a A"). However, this does not apply where the chosen IPEA has notifed the ternational Searching Authority If the IPEA, the applicant is invited to the chosen in the expiration of three	
2.	Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of Box No. V Reasoned state applicability; of Box No. VI Certain docur Box No. VI Certain defect Box No. VII Certain observed Box No. VIII Ce	ment of opinion with of invention atement under Rule 4 citations and explanaments cited ats in the international vations on the international Preliminary Examination of the first other than this calle 66.1 bis(b) that write the first of the ply together, where ag of Form PCT/ISA/2	regard to novelty, investigations apporting such ational application ational application on is made, this opinion of the local point of the local appropriate, with ame appropriate, with ame 220 or before the expire	n will usually be considered to be a A"). However, this does not apply where the chosen IPEA has notifed the ternational Searching Authority If the IPEA, the applicant is invited to the chosen in the expiration of three	
	Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of Box No. IV Box No. V Reasoned state applicability; of Box No. VI Certain document Box No. VII Certain defect Box No. VIII Certain observation of the International priority of the applicant chooses an Authority international Bureau under Ruwill not be so considered. If this opinion is, as provided a submit to the IPEA a written remonths from the date of mailing whichever expires later. For further options, see Form	ment of opinion with of invention atement under Rule 4 citations and explanaments cited ats in the international vations on the international Preliminary Examination of the first other than this calle 66.1 bis(b) that write the first of the ply together, where ag of Form PCT/ISA/2	regard to novelty, investigations apporting such ational application ational application on is made, this opinion of the local point of the local appropriate, with ame appropriate, with ame 220 or before the expire	n will usually be considered to be a A"). However, this does not apply where the chosen IPEA has notifed the ternational Searching Authority If the IPEA, the applicant is invited to the chosen in the expiration of three	
2.	Box No. II Priority Box No. III Non-establish Box No. IV Lack of unity of Box No. V Reasoned state applicability; of Box No. VI Certain docur Box No. VI Certain defect Box No. VII Certain observed Box No. VIII Ce	ment of opinion with of invention atement under Rule 4 citations and explanaments cited ats in the international vations on the international Preliminary Examination of the first other than this calle 66.1 bis(b) that write the first of the ply together, where ag of Form PCT/ISA/2	regard to novelty, investigations apporting such ational application ational application on is made, this opinion of the local point of the local appropriate, with ame appropriate, with ame 220 or before the expire	n will usually be considered to be a A"). However, this does not apply where the chosen IPEA has notifed the ternational Searching Authority If the IPEA, the applicant is invited to the chosen in the expiration of three	

European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840

Goller, W

Telephone No. +49 30 25901-494



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050242

	Box No. I Basis of the opinion
1.	With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
	This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
-	a. type of material:
	☐ a sequence listing
	□ table(s) related to the sequence listing
	b. format of material:
	☐ in written format
	in computer readable form
	c. time of filing/furnishing:
	☐ contained in the international application as filed.
	filed together with the international application in computer readable form.
	furnished subsequently to this Authority for the purposes of search.
	In addition, in the case that more than one version or copy of a sequence listing and/or table relating there has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
	4. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050242

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

2-14,16-18,20

No:

Claims

1,15,19

Inventive step (IS)

Yes: Claims

No:

Claims

1-20

1-20

Industrial applicability (IA)

No:

Yes: Claims

Claims

2. Citations and explanations

see separate sheet

Certain observations on the international application Box No. VIII

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V.

1. Reference is made to the following documents:

D1: US 5 553 083 A (MILLER ET AL) 3 September 1996 (1996-09-03)

D2: YAMAUCHI Y ED - NG C S ET AL: "On the packet radio multicast scheme for the personal communications era" SINGAPORE ICCS '94. CONFERENCE PROCEEDINGS. SINGAPORE 14-18 NOV. 1994, NEW YORK, NY, USA,IEEE, US, vol. 2, 14 November 1994 (1994-11-14), pages 576-580, XP010150006 ISBN: 0-7803-2046-8

D3: PEJHAN S ET AL: "ERROR CONTROL USING RETRANSMISSION SCHEMES IN MULTICAST TRANSPORT PROTOCOLS FOR REAL-TIME MEDIA" IEEE / ACM TRANSACTIONS ON NETWORKING, IEEE INC. NEW YORK, US, vol. 4, no. 3, 1 June 1996 (1996-06-01), pages 413-427, XP000591081 ISSN: 1063-6692

D4: EP-A-1 154 660 (NTT DOCOMO, INC) 14 November 2001 (2001-11-14)

D5: US 2003/058821 A1 (LEE CHIEH-HO ET AL) 27 March 2003 (2003-03-27)

2. INDEPENDENT CLAIMS 1, 15, 19

2.1 Non-withstanding the lack of clarity (see Item VIII), the present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 15,19 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parentheses applying to this document): A method of operating a packet data multicast communication system comprising a first station and a plurality of second stations, the first and second stations having transceiving equipment for communication between the first and second stations (column 2 lines 32-35, definition of any multicast system),

the method comprising the first station transmitting a data packet and at least one of the plurality of the second stations receiving the data packet (column 2 lines 32-35), wherein least one of the plurality of the second stations measures the quality of reception of the received data packet (column 2 lines 50-53, clients indicate if packets need to be resent, determination if a packet needs to be resent is also a determination of the quality of the received packet),

and determining into which one of at least three predetermined quality ranges the

measured quality falls (column 2, lines 50-55, the three quality ranges defined in D1 are: correctly received; received in error; not received at all), wherein the first station adopts a respective subsequent transmitter behaviour in response to each of the at least three predetermined quality ranges (implicit in D1, retransmission or not) and wherein the subsequent transmitter behaviour corresponding to at least two non-contiguous ones of the quality ranges is identical (column 2 lines 46-55, retransmission is requested for the quality ranges "received in error" and "not received". As no definition of "non-contiguous" is given, "received in error" and "not received" are considered as non-contiguous).

- 2.2 Independent claims 15 and 19 relate to system carrying out the method of claim 1 and a receiver station used in this system. As D1 also discloses the system (column 2 lines 40 45) and the receiver (column 2 line 33), the subject-matter of claims 15 and 19 is also not novel.
- 3. DEPENDENT CLAIMS 2-14, 16-18, 20
 Dependent claims 2-14, 16-18, 20 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).
- 4. It should be noted that neither the independent nor the dependent claims clearly define the embodiment defined in the description page 4 lines 7-21. Concerning the novelty and/or involvement of an inventive step of embodiments defined in the description, the attention is drawn to documents D2-D5, eg D2 paragraphs 2.1 and 2.2.

Re Item VIII.

- 5. The application does not meet the requirements of Article 6 PCT, as claims 1-20 are not clear.
- 5.1 Independent claims 1, 15 and 19 define that "at least three" quality ranges exist out if which "at least two" are non-contiguous. As "at least three" and "at least two" is not limited to 3 or 2 respectively, this vague and unclear definition also includes impossible cases eg that three out of three are non-contiguous. This definition is

International application No.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

PCT/IB2005/050242

therefore not clear.

Moreover, the case that 3 ranges are defined and the transmitter behaviour is identical in all 3 ranges is also included in this definition. In this case the definition of the ranges would be completely arbitrary.

- 5.2 Furthermore, it is defined that two quality ranges are non-contiguous without defining criterion for determining if two quality ranges are non-contiguous. This feature is thus not clear and therefore does not limit the scope of the claims at all.
- 5.3 Claim 19 refers to a "second station", which could be interpreted in the light of the description to be a receiving station. However, the features defined relate to the first station, which is apparently the transmitter station. It is therefore not clear, for which subject-matter protection is sought.
- 5.4 The definition of the claims is unduly broad in comparison to the description, therefore, the scope of the claims is not supported by the description. None of the claims clearly defines the embodiment of the description page 4 lines 7-21.

PATENT COOPERATION TREATY

			•	REC'D U. 8 APR 2005		
om the FERNATIONAL SEARC	HING AUTHO	RITY		WIPO PCT		
				PCI		
o:						
			,	TENLODINION OF THE		
see form Po	T//SA/220	·	WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (DOT Dulo 43 bis 1)			
298 101111 1	J (//C/ VZZ0					
			(PCT Rule 43bis.1)			
		Date of mailing				
			(day/month/year) see form PCT/ISA/210 (second sheet)			
			TOO FURTHER	ACTION		
Applicant's or agent's file r	eference A		FOR FURTHER See paragraph 2 bel	low		
see form PCT/ISA/22		International filing date		Priority date (day/month/year)		
nternational application N	o.	20.01.2005	(day/iiio	23.01.2004		
PCT/B2005/050242	is asking (IDO) on		on and IPC			
International Patent Class H04L12/18, H04L1/1	mcation (IPC) or 8	both national classification				
		· · · · · · · · · · · · · · · · · · ·				
Applicant KONINKLIJKE PHIL	IPS ELECTR	ONICS N.V.				
		the second to the fe	ollowing items:			
 This opinion co 	intains indica	tions relating to the fo	Ollowing Rome.	·		
⊠ Box No. I	⊠ Box No. I Basis of the opinion			·		
☐ Box No. II	Priority ⁻		h . !	ative step and industrial applicability		
☐ Box No. III	Non-establis	hment of opinion with r	egard to novelty, inve	ntive step and industrial applicability		
☐ Box No. IV		- A - A -				
⊠ Box No. V	applicability;	citations and explanati	ions supporting such s	d to novelty, inventive step or industrial statement		
☐ Box No. VI	Certain docu	ments cited	lientian			
☐ Box No. VII	Certain defe	ects in the international	application			
☑ Box No. VIII	Certain obse	ervations on the Interna	ational application	•		
2. FURTHER ACT	TION					
the applicant c	hooses an Aut ureau under Ri	hority other than this or ule 66.1 <i>bis</i> (b) that writt	ne to be the IPEA and en opinions of this Int	will usually be considered to be a A"). However, this does not apply where it the chosen IPEA has notifed the ternational Searching Authority		
If this opinion is submit to the Imonths from the whichever exp	s, as provided PEA a written ne date of mail ires later.	ing of Form PCT/ISA/22	ne a written opinion of appropriate, with amen 20 or before the expira	the IPEA, the applicant is invited to adments, before the expiration of three ation of 22 months from the priority date,		
For further opt	tions, see Forn	n PCT/ISA/220.		•		
1		s to Form PCT/ISA/220.				
			·			
			Authorized Office	COIT Takes Fallente		
Name and mailing ad	dress of the ISA	:		Salar M.		
all Europe	ean Patent Office	e - Gitschiner Str. 103	Goller, W			
D-1095	58 Berlin 9 30 25901 - 0		1	. +49 30 25901-494		
Eav. 1	49 30 25901 - 84	40	l elephone 140.			

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050242

Box No. I Basis of the opinion
1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Bules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
a. type of material:
□ a sequence listing
☐ table(s) related to the sequence listing
b. format of material:
in written format
in computer readable form
c. time of filing/furnishing:
☐ contained in the international application as filed.
filed together with the international application in computer readable form.
furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relating there has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050242

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

2-14,16-18,20

No:

Claims

1,15,19

Inventive step (IS)

Yes: Claims

No: Claims

1-20

Industrial applicability (IA)

Yes: Claims

1-20

No: Claims

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V.

- 1. Reference is made to the following documents:
 - D1: US 5 553 083 A (MILLER ET AL) 3 September 1996 (1996-09-03)
 - D2: YAMAUCHI Y ED NG C S ET AL: "On the packet radio multicast scheme for the personal communications era" SINGAPORE ICCS '94. CONFERENCE PROCEEDINGS. SINGAPORE 14-18 NOV. 1994, NEW YORK, NY, USA,IEEE, US, vol. 2, 14 November 1994 (1994-11-14), pages 576-580, XP010150006 ISBN: 0-7803-2046-8
 - D3: PEJHAN S ET AL: "ERROR CONTROL USING RETRANSMISSION SCHEMES IN MULTICAST TRANSPORT PROTOCOLS FOR REAL-TIME MEDIA" IEEE / ACM TRANSACTIONS ON NETWORKING, IEEE INC. NEW YORK, US, vol. 4, no. 3, 1 June 1996 (1996-06-01), pages 413-427, XP000591081 ISSN: 1063-6692
 - D4: EP-A-1 154 660 (NTT DOCOMO, INC) 14 November 2001 (2001-11-14)
 - D5: US 2003/058821 A1 (LEE CHIEH-HO ET AL) 27 March 2003 (2003-03-27)
- 2. INDEPENDENT CLAIMS 1, 15, 19
- 2.1 Non-withstanding the lack of clarity (see Item VIII), the present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 15,19 is not new in the sense of Article 33(2) PCT.
 - Document D1 discloses (the references in parentheses applying to this document): A method of operating a packet data multicast communication system comprising a first station and a plurality of second stations, the first and second stations having transceiving equipment for communication between the first and second stations (column 2 lines 32-35, definition of any multicast system),
 - the method comprising the first station transmitting a data packet and at least one of the plurality of the second stations receiving the data packet (column 2 lines 32-35), wherein least one of the plurality of the second stations measures the quality of reception of the received data packet (column 2 lines 50-53, clients indicate if packets need to be resent, determination if a packet needs to be resent is also a determination of the quality of the received packet),
 - and determining into which one of at least three predetermined quality ranges the

measured quality falls (column 2, lines 50-55, the three quality ranges defined in D1 are: correctly received; received in error; not received at all), wherein the first station adopts a respective subsequent transmitter behaviour in response to each of the at least three predetermined quality ranges (implicit in D1, retransmission or not) and wherein the subsequent transmitter behaviour corresponding to at least two non-contiguous ones of the quality ranges is identical (column 2 lines 46-55, retransmission is requested for the quality ranges "received in error" and "not received". As no definition of "non-contiguous" is given, "received in error" and "not received" are considered as non-contiguous).

- 2.2 Independent claims 15 and 19 relate to system carrying out the method of claim 1 and a receiver station used in this system. As D1 also discloses the system (column 2 lines 40 45) and the receiver (column 2 line 33), the subject-matter of claims 15 and 19 is also not novel.
- 3. DEPENDENT CLAIMS 2-14, 16-18, 20
 Dependent claims 2-14, 16-18, 20 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).
- 4. It should be noted that neither the independent nor the dependent claims clearly define the embodiment defined in the description page 4 lines 7-21. Concerning the novelty and/or involvement of an inventive step of embodiments defined in the description, the attention is drawn to documents D2-D5, eg D2 paragraphs 2.1 and 2.2.

Re Item VIII.

- 5. The application does not meet the requirements of Article 6 PCT, as claims 1-20 are not clear.
- 5.1 Independent claims 1, 15 and 19 define that "at least three" quality ranges exist out if which "at least two" are non-contiguous. As "at least three" and "at least two" is not limited to 3 or 2 respectively, this vague and unclear definition also includes impossible cases eg that three out of three are non-contiguous. This definition is

International application No.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

PCT/IB2005/050242

therefore not clear.

Moreover, the case that 3 ranges are defined and the transmitter behaviour is identical in all 3 ranges is also included in this definition. In this case the definition of the ranges would be completely arbitrary.

- 5.2 Furthermore, it is defined that two quality ranges are non-contiguous without defining criterion for determining if two quality ranges are non-contiguous. This feature is thus not clear and therefore does not limit the scope of the claims at all.
- 5.3 Claim 19 refers to a "second station", which could be interpreted in the light of the description to be a receiving station. However, the features defined relate to the first station, which is apparently the transmitter station. It is therefore not clear, for which subject-matter protection is sought.
- 5.4 The definition of the claims is unduly broad in comparison to the description, therefore, the scope of the claims is not supported by the description. None of the claims clearly defines the embodiment of the description page 4 lines 7-21.